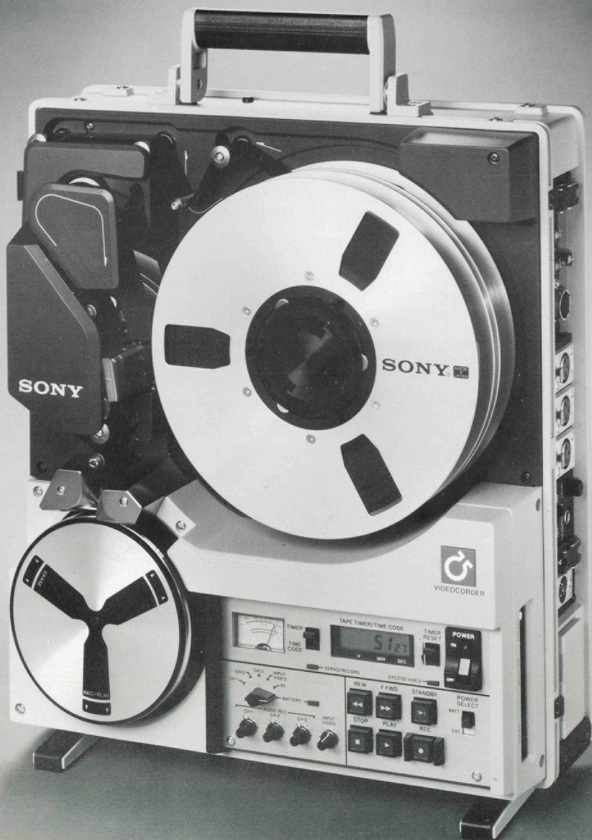


BVH-500PS

1 inch portable
videocorder

SONY
Broadcast



The Sony Broadcast BVH-500PS is a portable 1 inch Videocorder for 625-line PAL and SECAM operation, using a high band direct FM recording system to EBU type 'C' format. With its recordings fully interchangeable with the Sony Broadcast BVH-1100PS production recorder, the BVH-500PS combines the professional advantages of the Sony Broadcast 1 inch high band recording format with the field advantages of light weight, small size and battery operation.

FEATURES

Camera Interface

BVP series cameras connect directly with the BVH-500 PS, providing camera operation from the VTR battery and interface of control functions and recorder status indications.

Interchangeability

The BVH-500PS is specifically designed to complement the Sony Broadcast BVH-1100PS 1 inch professional high band recorder. All basic specifications such as tape format, carrier mode, etc., are identical. Battery operation, small size and light weight make the BVH-500PS ideal for any field production situation.

Portability

1 Hour Recording Time

Just over sixty minutes continuous recording with one 9 inch reel of Sony Broadcast V-16 high density video tape. A high resolution digital drum servo and electronic tape control system minimise gyroscopic errors and provide precise tape tension under all operating conditions.

Advanced Tape Control Systems

Monitoring Capability

The BVH-500PS features monochrome playback capability for on-location monitoring.

Built-in EBU Time Code Generator

Time code recording facility on third audio track.

Built-in Record Current Optimizer

Allows rapid adjustment for quick field set up.

Rugged Housing

The BVH-500PS housing is specially designed for dustproof and weatherproof operation.

Back-space Assemble Edit Function

The BVH-500PS is provided with a backspace assemble edit function. Perfect and precise assemble editing is possible with no picture interference at editing points. This makes the BVH-500PS especially suitable for applications which require rough editing during recording such as field location drama.

Tape Timer

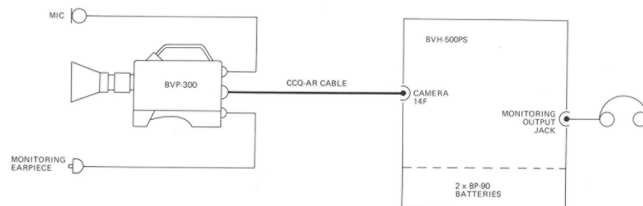
The digital tape timer can be switched to read either elapsed tape time or the time code generator output. Elapsed tape time count is stored for an hour after recorder power has been turned off.

Confidence Replay Head

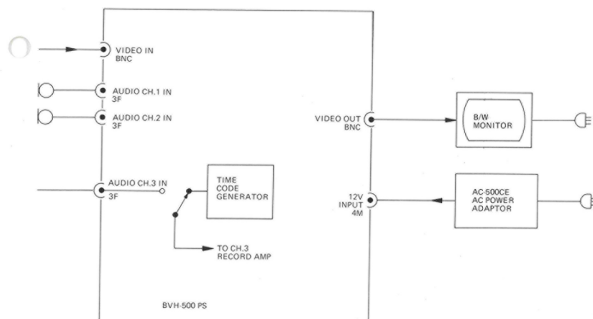
A stationary video playback head monitors the sync tip signal during recording and triggers an alarm indicator to warn of recording faults.

Design & specification may be subject to change without notice.

CONNECTIONS TYPICAL SYSTEM CONFIGURATIONS



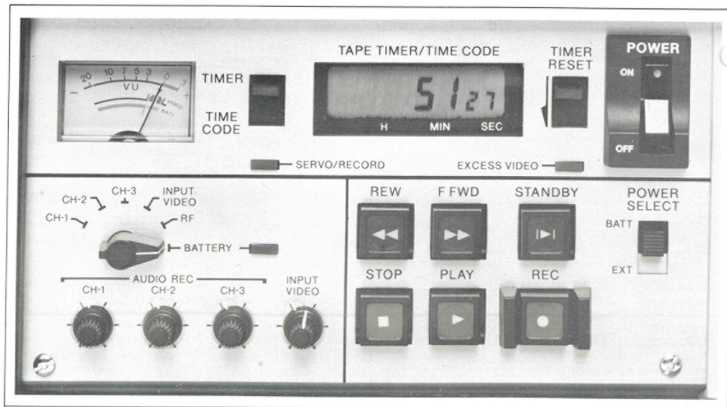
FIELD OPERATION WITH BVP-300 CAMERA, BATTERY OPERATION



AC POWER OPERATION, WITH TIME CODE RECORDING AND CHECK MONITORING



SIDE CONNECTOR PANEL



FUNCTION CONTROL PANEL

SPECIFICATIONS

VIDEO SIGNALS

| | |
|----------------------------|--------------------------------------|
| Video input | 1v p-p, 75 ohms |
| Colour framing input pulse | 6.25 Hz 50% duty cycle, TTL level |
| Monitor output | 1v p-p, 75 ohms (unlocked colour) |

VIDEO PERFORMANCE, BVH-1100PS REPLAY

| | |
|----------------------------------|---|
| Bandwidth | 5.5 MHz \pm 0.5 dB 6 MHz $-$ 3 dB |
| Signal/noise ratio | 43 dB |
| Differential Gain | 4% (with Sony Broadcast BVT-2000P/S TBC) |
| Differential Phase | 4° (with Sony Broadcast BVT-2000P/S TBC) |
| LF Linearity | 2% |
| Transient Response (2T pulse) | 1% K |
| Moire | $-$ 35 dB (75% colour bars) |
| Chrominance delay | 25 ns |

AUDIO SIGNALS

| | |
|------------------|---|
| Inputs | Switchable mic/line, 600 ohms, balanced Line sensitivity +23 to $-$ 22 dBm Mic sensitivity $-$ 60dBm |
| Headphone Output | $-$ 30 to $-$ 13 dBu |

AUDIO PERFORMANCE, BVH-1100PS REPLAY

| | |
|--------------------|--|
| Frequency response | 50 Hz $-$ 15 kHz $+1.5$ dB -3.0 dB (Ch.1 $-$ Ch.3) |
| Signal/noise ratio | 56 dB, Ch.1 and Ch.2 50 dB, Ch.3 (at 3% dist) |
| Distortion | 1.2% (at operating level) |
| Wow and flutter | Less than 0.12% RMS, unweighted |
| Crosstalk | $-$ 60 dB between any two tracks at 1 kHz |

GENERAL

| | |
|--------------------------|--|
| Power requirements | 12v DC, 4.7A |
| Operating temperature | 0°C $-$ 40°C |
| Humidity | 10 $-$ 90% (non-condensing) |
| Tape Speed | 23.98 cm/s (9.46 inch/s) |
| Writing Speed | 21.39m/s (70.3 ft/s) |
| Recording time | 1 hr 4 mins with 9 inch reel |
| Fast forward/rewind time | 4.5 mins max with 9 inch reel |
| Lock-up time | Less than 3.5 s |
| Operating position | Horizontal or vertical |
| Recommended tapes | Sony Broadcast V-16 series |
| Reel size | 8, 9, 9.25 and 9.5 inch, NAB type |
| Battery life | Approximately 1 hour 30 mins with two BP-90 batteries |

ACCESSORIES

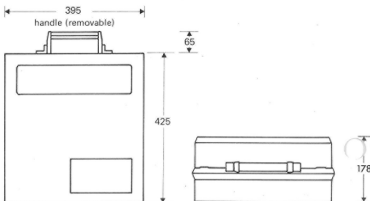
Included

Take up reel
Operation and Maintenance
manual

Optional

BP-90 battery
BC-210CE Battery charger
AC-500CE AC power adaptor
BVR-500 Remote control unit
CLP-550PS Colour playback
adaptor

DIMENSIONS



ALL DIMENSIONS IN MILLIMETRES

WEIGHT $-$ 22kg; INCLUDING BATTERY,
TAPE AND REEL

SONY
Broadcast



Contact your local
Sony Distributor
or write to

Sony Broadcast Ltd.

City Wall House
Basing View, Basingstoke
Hampshire RG21 2LA
United Kingdom

Telephone 0256 55011
Telex 85 84 24

Preliminary Product Information



CLP-550PS COLOUR PLAYBACK ADAPTOR

The CLP-550PS is a direct processing Colour Playback Adaptor for the BVH-500PS 1 inch portable Videocorder. In conjunction with a BVT-2000P/S Time Base Corrector it gives full broadcast quality colour replay and also provides video and audio monitoring facilities.

FEATURES

Simple multicore cable interface with BVH-500PS.
Video and audio monitoring selectors and audio level meter.
Drop out signal for external DDC operation.

SPECIFICATIONS

Video Performance, BVH-500PS Replay

| | |
|----------------------------------|---|
| Bandwidth | 25Hz - 5.5MHz ± 0.5 dB, 6MHz -3dB |
| Signal/Noise ratio | 43dB |
| Differential gain | 4% (with Sony Broadcast BVT-2000P/S TBC) |
| Differential phase | 4° (with Sony Broadcast BVT-2000P/S TBC) |
| Transient response (2T pulse) | 1 μ s |
| LF linearity | 1% |
| Moire | -35dB (75% colour bars) |
| Chrominance delay | 25ns |

Audio Performance, BVH-500PS Replay

| | |
|--------------------|--|
| Frequency response | 50Hz - 15kHz ± 1.5 dB -3.0dB |
| Signal/Noise ratio | 54dB, Ch.1 and Ch.2 48dB, Ch.3 (at 3% dist) |
| Distortion | 1.2% (at operating level) |
| Crosstalk | -60dB between any two tracks at 1kHz |

SIGNAL INPUTS

| | |
|----------------------|----------------------------|
| Adaptor in | BVH-500PS interface |
| Video in) | 1V p-p 75 ohms or bridging |
| TBC in) To Waveform | 1V p-p 75 ohms |
| Spare in) selector | 1V p-p 75 ohms |

SIGNAL OUTPUTS

| | |
|-------------------|--|
| Video | 2 at 1V p-p, 75 ohms |
| Waveform selector | Output level according to source selected, 75 ohms |
| Drop out signal | TTL level pulse or 0.3V p-p RF 75 ohms, selectable |
| Audio line | Ch.1-3, +8dBm/-16dBm, selectable, 600 ohms balanced |
| Audio monitor | -10dBm, with monitor level control at maximum, 600 ohms balanced. (Output disconnected when the headphone monitoring jack is used.) |
| Headphone | 8 ohms, unbalanced |

GENERAL

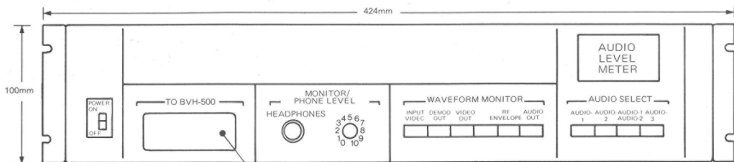
| | |
|-----------------------|--------------------------------------|
| Power input | 100/120/220/240V $\pm 10\%$ 50/60 Hz |
| Power consumption | 40W |
| Operating temperature | 0°C - 40°C |

INCLUDED ACCESSORIES

2 metre BVH-500/CLP-500 interconnecting cable
Power cable
Rack mounting brackets
Operation and Maintenance manual

Design and specification may be subject to change without notice

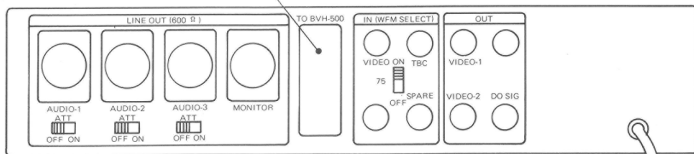
FRONT PANEL



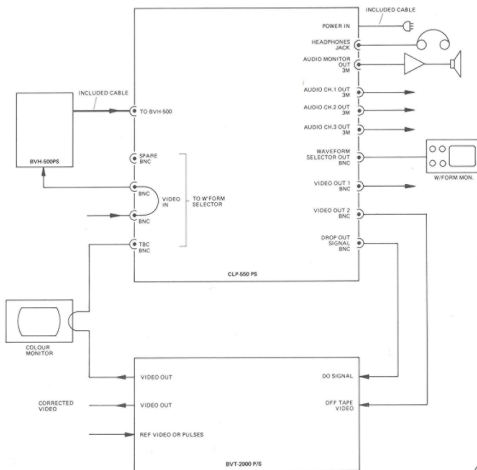
DEPTH 462mm WEIGHT 13 kg

ALTERNATIVE
POSITIONS
FOR BVH-500
INTERFACE CONNECTOR

REAR CONNECTOR PANEL



POWER CABLE



Contact your local
Sony Distributor
or write to

SONY
Broadcast

Sony Broadcast Ltd.

City Wall House
Basing View, Basingstoke
Hampshire RG21 2LA
United Kingdom

Telephone (0256) 55 0 11
International +44 256 55 0 11
Telex 85 84 24